

Network Layout

Function:

- 1) State DMV examiners shall certify a particular motor vehicle registrant is authorized to use a particular modem (either PSBL 758-768/788-798 MHz or DBL 758-763/788-793 MHz telematic control unit modem (TCUM)). The State shall transmit the DMV-issued TCUM IP# and an associated TCU ID# along with the registrant's biometric identification (as a further requirement if a private owner chooses to opt-in for a personal webspace).
- 2) State PSBLs shall provide aggregate data useful in compiling timely and accurate accounting for federally mandated reports and statistics.
- 3) Personal use TCUs may request the specific mode of information/service, range of frame, etc. via the unit's function buttons or by voice commands.
- 4) Metropolitan Service Area (MSA), Rural Service Area (RSA) and Private vehicular service providers (VSPs) may provide data to its registered member's TCU from its own servers or from servers linked to another domain or website, and shall document the transmitted data. The VSPs have proprietary control of data exchanges with all privately-owned TCUs certified for general public use or validated by subscription.
- 5) The PSAP may demand voice communications with a distressed/querying TCUM user for further evaluation of an appropriate response. The PSAP may further enable voice communications between the emergency response personnel and the distressed/querying motorist.
- 6) MSA and RSAs (and Private VSPs through its interconnection with a DBL) shall forward requests for emergency help from its members. The DBL shall also identify the request as originating from a voluntary or automatic means along with the user's location.
- 7) Emergency Response TCUs may request the specific mode of information/service, range of frame, etc. via the unit's function buttons or by voice commands. However, any request for profiling of, or voice communications with another mobile unit shall be through the agency's legacy radio frequency band to the dispatch operator and sanctioned for use on the SWBN. Rescue TCUs may request through its dispatcher of an occupant's listed medical conditions/medications/contacts from the member's webspace. Additionally, ambulances may forward vital-sign data/images of wounds to the awaiting emergency room personnel upon dispatch approval.
- 8) PSBL and DBL VSPs shall provide data to its public safety member TCU(s) from its own servers, or from the respective agency's servers, or from servers linked to another domain or website, and shall document the transmitted data. The VSPs have proprietary control of data exchanges with all Emergency Response TCUs certified for its domain use.

9) Public safety operators may demand a specific TCU be displayed to the dispatcher by supplying the specific modem IP# to its associated VSP. The authority, having command priority, may further demand the location be displayed to an assigned police/fire/rescue TCU. Operations may authorize its designated response vehicle's dynamic location be identified to a distressed network member and/or to the general public. Dispatch operators may further set parameters to designate a specific location and/or path to destination for public recognition. Operations may further validate third-party logistics use or authorize and delegate any of its legacy communication systems and in-house graphic databases for use on the SWBN or may inquire within strict guidelines of a network member's identification based upon prior location or to make contact with a member.

10) PSBL and DBL VSPs shall supply a jurisdictional-map of monitored public safety vehicles to their respective agencies along with vehicle identification, as well as any network programmed "alarm event" notification. The provider shall immediately inform of solicitations and further display other fleet vehicles when authorized by its respective command centers.

11) Governmental and commercial fleet TCUs may request the specific mode of information/service, range of frame, etc. via the unit's function buttons or by voice commands.

12) PSBL, MSA, RSA, and Private VSPs may provide data to its respective fleet member TCU from its own servers, or from the respective agency's/company's servers, or from servers linked to another domain or website, and shall document the transmitted data. The VSPs have proprietary control of data exchanges with all fleet-owned TCUs certified for public use, or validated by subscription, or government authorized.

13) Governmental and commercial fleet operators may demand any of its vehicles be depicted to another fleet-owned vehicle. Dispatch operations, having command priority, shall have control of information in the ad-sponsor's area of framing for the purpose of custom messages/signals to any or all of its vehicles. Commercial operators may authorize the movements of a service vehicle(s) to be identified to a specific network member(s) and/or for public recognition and may further set parameters to identify its path to destination. Certain other dispatch operations may further set parameters to designate a specific work-location and/or detour path for public recognition.

14) PSBL, MSA, RSA and Private VSPs shall supply a jurisdictional-map of monitored fleet vehicles to their respective operations center along with vehicle identification, as well as any network programmed "alarm event" notification. The provider shall immediately inform of solicitations and further display other fleet vehicles when authorized by its respective command centers.

15) The Weather Service provider shall transmit compiled maps of meteorological data derived from its servers for the areas in and around the MSA VSP's jurisdiction.

16) A MSA VSP shall transmit only the meteorological and location data received from its domain members for use by the bureau in supplementing data input necessary for NWS computerized predictions. (*i.e.*, anonymous data only)

17) State Service Area operations to Metropolitan Service Area operations:

- ▶ The SSA-PSBL shall transmit transparent monitoring and authorized control access commands to the MSA-DBL's Core Broadband servers within SWBN guidelines.

- ▶ The SSA-PSBL may demand DBL and Private VSP member contact data relative to a specified location at a prior time for valid investigations compliant to SWBN guidelines.

- ▶ The SSA-PSBL shall transmit the realtime movements of "mimic- probes" supplied by a 3rd Party tracking system in use by a member TCU within its domain and any received from the domains of adjacent SSA-PSBLs to the corresponding MSA-DBL.

- ▶ State and/or Federal guest (*sic*) vehicle locations may be authorized and transmitted for use as realtime icons displayed and/or voiced to the traveling public or to specific members upon command center operator validation.

- ▶ The SSA-PSBL shall transmit membership data for continuing authorized services to an out-of-state SWBN guest member's TCU.

- ▶ The SSA-PSBL shall transmit data relative to locating a DBL member's TCU that is out of its jurisdiction for each State boarder crossover.

18) Metropolitan Service Area operations to State Service Area operations:

- ▶ The MSA-DBL shall transmit required aggregate data and transparent monitoring from its Core Broadband servers within SWBN guidelines.

- ▶ The MSA-DBL may demand PSBL member contact data relative to a specified location at a prior time for valid investigations compliant to SWBN guidelines.

- ▶ The MSA-DBL shall transmit the realtime movements of "mimic- probes" supplied by a 3rd Party tracking system in use by a member TCU within its domain and any received from the domains of RSA-DBLs and Private VSPs to the SSA-PSBL.

- ▶ City, county, local governmental, commercial and personal vehicle locations may be authorized and transmitted for use as realtime icons displayed and/or voiced to specific members upon command center or commercial fleet operator or public telematics-user validation.

- ▶ The MSA-DBL shall transmit membership data for continuing authorized services to a SWBN member's TCU in an adjacent State.

- ▶ The MSA-DBL shall transmit data relative to identifying a guest DBL member's TCU that is leaving State jurisdiction.

- ▶ The MSA-DBL shall transmit its current traffic status-maps to SWBN members.

19) A Rural Service Area operator to a Metropolitan Service Area operator; and,
An adjacent State Service Area operator to a State Service Area operator:

- ▶ The RSAs shall transmit required aggregate data and transparent monitoring from its Core Broadband servers within SWBN guidelines.

- ▶ The RSAs may demand MSA-DBL and Private VSP member contact data relative to a specified location at a prior time for valid investigations compliant to SWBN guidelines.

- ▶ Adjacent SSA-PSBLs shall transmit to the SSA the realtime movements of "mimic-probes" supplied by a 3rd Party tracking system in use by a member TCU within its

domain that leaves its jurisdiction. RSAs shall transmit to its neighboring MSA the realtime movements of all "mimic- probes" supplied by a 3rd Party tracking system in use by a member TCU within its domain.

► State and/or Federal guest (*sic*) vehicle locations may be authorized and transmitted for use as realtime icons displayed and/or voiced to the traveling public or to specific members upon command center operator validation. RSA vehicle locations may be authorized and transmitted for use as realtime icons displayed and/or voiced to the traveling public or to specific members upon command center operator or commercial fleet operator or public telematics-user validation.

► Adjacent SSA-PSBLs shall transmit membership data for continuing authorized services as an out-of-state SWBN guest member. RSAs shall transmit membership data for continuing authorized services as a SWBN member.

► The PSBL shall transmit data relative to locating a DBL member's TCU that is out of its jurisdiction for each State boarder crossover. RSAs shall transmit data relative to identifying a SWBN member's TCU that is leaving State jurisdiction.

► Adjacent SSA-PSBLs shall transmit traffic status-maps limited to 5 miles within its State borders.

20) A Metropolitan Service Area operator to a Rural Service Area operator; and,
A State Service Area operator to an adjacent State Service Area operator:

► The MSA-DBL shall transmit transparent monitoring and authorized control access commands to the RSA-DBL's Core Broadband servers within SWBN guidelines.

► The MSA-DBL may demand DBL member contact data relative to a specified location at a prior time for valid investigations compliant to SWBN guidelines.

► The MSA-DBL shall transmit the realtime movements of "mimic- probes" supplied by a 3rd Party tracking system in use by a member TCU within its domain and any received from the domains of the SSA-PSBL, private VSPs and other RSAs.

► Federal, State, City, county, local governmental, commercial and personal vehicle locations may be authorized and transmitted for use as realtime icons displayed and/or voiced to specific members upon command center or commercial fleet operator or public telematics-user validation.

► The SSA-PSBL shall transmit membership data for continuing authorized services as an out-of-state SWBN guest member. The MSA shall transmit wireless services to all public telematics-users carried by its respective RSAs for continuing authorized services as a SWBN member.

► The MSA-DBL shall also transmit its current traffic status-maps to it respective RSA members for distribution to the public safety community.

► The SSA-PSBL shall transmit traffic status-maps limited to 5 miles within its State borders.

21) Private VSPs to a Metropolitan Service Area operator:

► Private VSPs shall transmit the realtime movements of "mimic- probes" supplied by a 3rd Party tracking system in use by a client's TCU within jurisdiction of the corresponding MSA-DBL.

- ▶ Client vehicle locations may be authorized and transmitted for use as realtime icons displayed and/or voiced to the traveling public or to specific SWBN members upon command center operator or private telematics-user validation.
- ▶ Private VSPs may transmit a member's authorized current location for identifying a work zone and an alternative detour route to be displayed in the public domain.
- ▶ Private VSPs shall transmit 5% anonymous probe-data within its domain for use in generating the standard local traffic status-maps.

22) Metropolitan Service Area to a Private VSP:

- ▶ The MSA-DBL shall transmit the realtime movements of "mimic- probes" supplied by a 3rd Party tracking system in use by a SWBN member's TCU within its domain and received from the domains of SSA-PSBLs and RSA-DBLs.
- ▶ Federal, State, City, county, local governmental, commercial and personal vehicle locations may be authorized and transmitted for use as realtime icons displayed and/or voiced to specific private members upon command center or public telematics-user validation.
- ▶ The MSA-DBL shall transmit its current traffic status-maps to SWBN members.

23) Internet to SSA, MSA, RSAs and Private VSPs:

- ▶ VSPs shall require authenticating passwords or biometrics of individuals requesting access to a member's webspace or for the location of a specific police, fleet, rescue, or transit vehicle.
- ▶ Location-data of property or persons, derived from 3rd Party tracking systems, may be recognized and utilized by public, private or government members for logistical use in their own vehicle TCU(s) when that data is forwarded to the MSA through a member's webspace, a private VSP's client, or through the authorities having legal declaration.
- ▶ VSPs may receive websites from compliant requests from member vehicle TCUs.
- ▶ VSPs shall accept requests from Web connected hospitals that support https.

24) VSPs to the Internet:

- ▶ Upon verification of a designated passcode, network cooperative VSPs shall transmit the owner-authorized response to an individual requesting data of a specific private, police, fleet, rescue, or transit vehicle through https means.
- ▶ Within SWBN guidelines, realtime tracking of member vehicles may be offered as ad-sponsored, pay-per-use or governmental service through the Internet to a Web-enabled device or free to a private client's authorized customer, based upon the given inquirer's passcode.
- ▶ VSPs may forward requests for websites from a member's vehicle TCU.
- ▶ VSPs may forward authorized user-specific data to emergency room personnel.

25) Any private citizen, may request access to a map-depicted location of his/her own vehicle's TCU and display it on a Web-enabled device when authentication is verified. Request for the location of vehicles not owned by the Web user may be permitted when parameters are set by the owner/administrator for authorized data access (*e.g.*, passwords, invoice#, address, bioprint, etc., or may remove the access requirement).

26) Data viewed as authorized to Web users shall be through a secure https website.

27) Hospitals may request further information upon notice of an incoming vehicle through a secure https website. Hospitals may request direct voice communication to enroute medical technicians or private citizens recognized in emergency status.

28) Vehicle location, communications, data and images viewed by emergency room personnel shall be through a secure https website.

29) Taxpayer funded DOT traffic management centers may be monitored by the MSA-DBL's traffic status servers for an "alarm event" not yet recognized by its own public telematics-users.

30) The MSA-DBL may provide SWBN recognized "alarm event" locations to traffic centers on roads it already monitors with public funds.

31) No SSA, MSA, RSA or SWBN cooperative private VSP shall directly accept location-data from 3rd Party tracking providers. Rather, the location-data made available by 3rd Party websites to its clients that are also SWBN members may transfer the realtime movements of the target to their vehicle's TCU(s) when that data is linked to the VSP through an associated webspace, client, or an agency's operation center and transmitted for distribution amongst all members. Location-data of/from helicopters and abducted/missing persons shall be exempt from 3rd Party "mimic-probe" programs when associated to a specific law enforcement docket number.